



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/089,290	06/01/1998	JIE LIANG	TI-26415	2679

23494 7590 05/21/2003

TEXAS INSTRUMENTS INCORPORATED  
P O BOX 655474, M/S 3999  
DALLAS, TX 75265

EXAMINER

LEE, Y YOUNG

ART UNIT PAPER NUMBER

2613

DATE MAILED: 05/21/2003

20

Please find below and/or attached an Office communication concerning this application or proceeding.

10



UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office  
ASSISTANT SECRETARY AND COMMISSIONER OF  
PATENTS AND TRADEMARKS  
Washington, D.C. 20231

**MAILED**

MAY 21 2003

Technology Center 2600

**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Paper No. 20

Application Number: 09/089,290

Filing Date: 6/1/98

Appellant(s): Liang et al

---

Carlton Hoel  
For Appellant

**EXAMINER'S ANSWER**

This is in response to appellant's brief on appeal filed 5/12/03.

Art Unit: 2713

**(1) *Real Party in Interest***

A statement identifying the real party in interest is contained in the brief.

**(2) *Related Appeals and Interferences***

The brief does not contain a statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief. Therefore, it is presumed that there are none. The Board, however, may exercise its discretion to require an explicit statement as to the existence of any related appeals and interferences.

**(3) *Status of Claims***

The statement of the status of the claims contained in the brief is correct.

**(4) *Status of Amendments After Final***

No amendment after final has been filed.

**(5) *Summary of Invention***

The summary of invention contained in the brief is correct.

**(6) *Issues***

The appellant's statement of the issues in the brief is correct.

**(7) *Grouping of Claims***

The rejection of claims 1-5 stand or fall together because appellant's brief does not include a statement that this grouping of claims does not stand or fall together and reasons in support thereof. See 37 CFR 1.192(c)(7).

Art Unit: 2713

**(8) *Claims Appealed***

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(9) *Prior Art of Record***

The following is a listing of the prior art of record relied upon in the rejection of claims under appeal.

5,691,768

CIVANLAR ET AL

11-1997

**(10) *Grounds of Rejection***

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-5 are rejected under 35 U.S.C. 102(e) as being anticipated by Civanlar et al.

This rejection is set forth in prior Office action, Paper No. 15, and explained below.

Civanlar et al, in Figures 1 and 4, discloses a multiple resolution decoder method (see Title) that is the same method of decoding MPEG encoded video containing P frames (e.g. col. 5, lines 61-63) as specified in claims 1-5 of the present invention, comprising the steps of decoding a first macroblock 1 of a first predicted frame 401 at a first resolution (e.g. 320 x 240) and decoding a second macroblock 10 of the first predicted frame 401 includes upsampling of a stored reference macroblock 409 at a second resolution greater than the first resolution; wherein the macroblocks 1-10 have associated motion vectors (col. 5, lines 1-12); and wherein the first macroblock has high frequency component energy (80 x 48) less than a threshold and the second macroblock has high frequency component energy (320 x 240) greater than the threshold (160 x 112).

Art Unit: 2713

**(11) Response to Argument**

In response to appellant's argument on page 3 of the brief that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., change decoding resolution during its decoding) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Appellant seems to argue that claim 1 specifies same size and same image macroblocks within a single frame are decoded in two different resolutions. However, a recitation that "each of equal sized duplicate image within one predicted frame" having two different possible resolution decoding within the frame is not found in Appellant's claim 1, as illustrated in Figure 30a of Appellant's Drawings. Without such specific limitation included in the claims, Examiner maintains that the invention of Civanlar et al is consistent with Appellant's disclosure in its broadest sense where macroblocks may be of variable sizes and located at different parts of the frame to be decoded and stored in memory.

One possible interpretation of Appellant's claim 1 requires a method of decoding video containing a P frame in various resolutions, comprising two steps:

- (1) for one or more macroblocks, decode one macroblock at a first resolution; and
- (2) decode a different macroblock at a second resolution greater than the first resolution.

Art Unit: 2713

Under this interpretation, Civanlar et al discloses a decoder 402 for decoding one or more macroblocks (e.g. 1, 4, 7) of a single frame 401 in at least two different resolutions (e.g. 320 x 240 and 160 x 112). Macroblock 1 is decoded at a resolution greater than macroblock 4.

Another possible interpretation of Appellant's claim 1 that is also consistent with Appellant's Specification specifies a method of decoding P frames of a video signal, comprising two processes:

- (1) decode at least one macroblock of the video at a first resolution; and
- (2) decode a second equal-sized macroblock of the video at a second resolution greater than the first resolution.

Again, Figure 4 of Civanlar et al also anticipates such alternative interpretation by disclosing a decoder 402 for performing two different resolution decoding. Image 401 is divided into 4 macroblocks of equal size but decoded at two different resolutions. The lower right macroblock, consisting of sub-blocks 4-10, of image 401 is decoded at a reduced resolution 320 x 224; and decoder 402 decodes at least one other macroblock 1 of image 401 at a resolution 320 x 240 greater than the reduced resolution 320 x 224.

In conclusion, Examiner respectfully submits that Appellant's argument regarding independent claim 1 that the two macroblocks of different resolution within a single frame of a single signal is not necessarily limited to Appellant's only interpretation.

Art Unit: 2713

Finally, in response to Appellant's argument that item 407 in Civanlar et al does not do decoding, it is submitted that Figure 4 of Civanlar et al illustrates a decoding system. Element 407 is part of the decoding process whereas item 409 is a stored reference mapping table used during the decoding process.

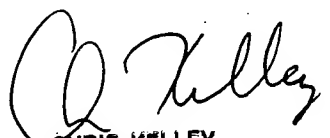
**(12) Conclusion**

For the above reasons, it is believed that the rejections should be sustained.

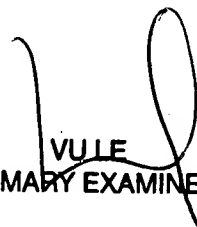
Respectfully submitted,

  
YOUNG LEE  
PRIMARY EXAMINER

Young Lee/yl  
May 19, 2003

  
CHRIS KELLEY  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600

Texas Instruments Incorporated  
PO Box 655474, M/S 3999  
Dallas, Texas 75265

  
VULE  
PRIMARY EXAMINER